



STRATEGIC PLANNING SESSION Memorandum of Meeting

8:30 A.M. to 10:00A.M., Thursday December 7th, 2017 – Kitchener, Ontario

Present:

Kevin Williams (Chair)	Atlantic	Marc Warden	Hubbell
Jason Sherwood	Atlantic	Dave Newbigging	AMD
Nick Spence	Atlantic	Kamran Derayah	AMD
Janine Yetke	Armtec	Mike Mounts	Valfilm
Heba Ahmed	Armtec	Jim Evans	AK Steel
Lyndsay Dokas	Armtec	Ray Wilcock	CSPI
Bruce Matheson	Frontier		

Guests:

Mike McGough	NCSPA	Chuck Hitt	Worthington
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Absent:

John Buckner	Tee Group	David Watson	Leland
Todd Gray	ACI	Ian Berry	Warner
Byron Nelson	Leland	Shane Setter	Ironside
Randy McDonald	Armtec		

1. Welcome and Opening Remarks – Kevin

Kevin opened the meeting and welcomed all members. Attendance was taken and is recorded above.

2. Review Minutes from June 5th, 2017 and Approve

Minutes were reviewed and accepted. A motion for approval was made by **Heba Ahmed**, second by **Jason Sherwood**.

3. Strategic Plan Overview

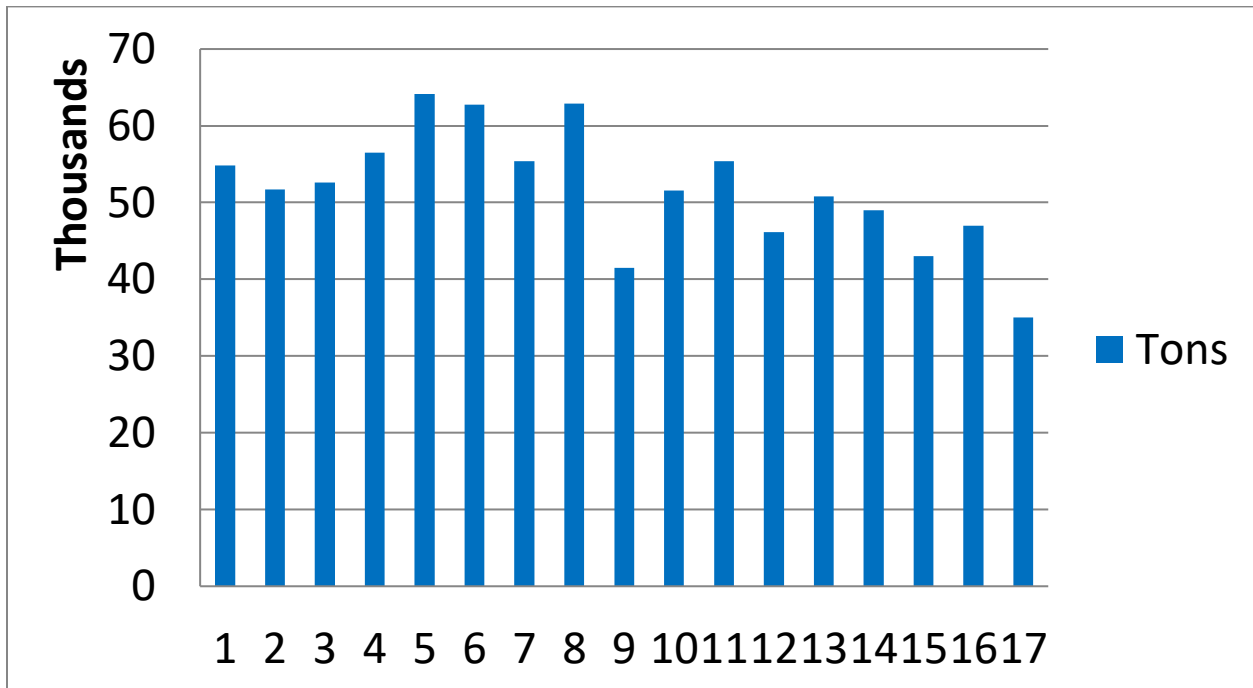
- Answer the question 'Why Steel?'
- Penetration into the concrete market. (DOT and municipality focus).
- Educate colleges & university students

4. Key Performance Indicators (KPI)

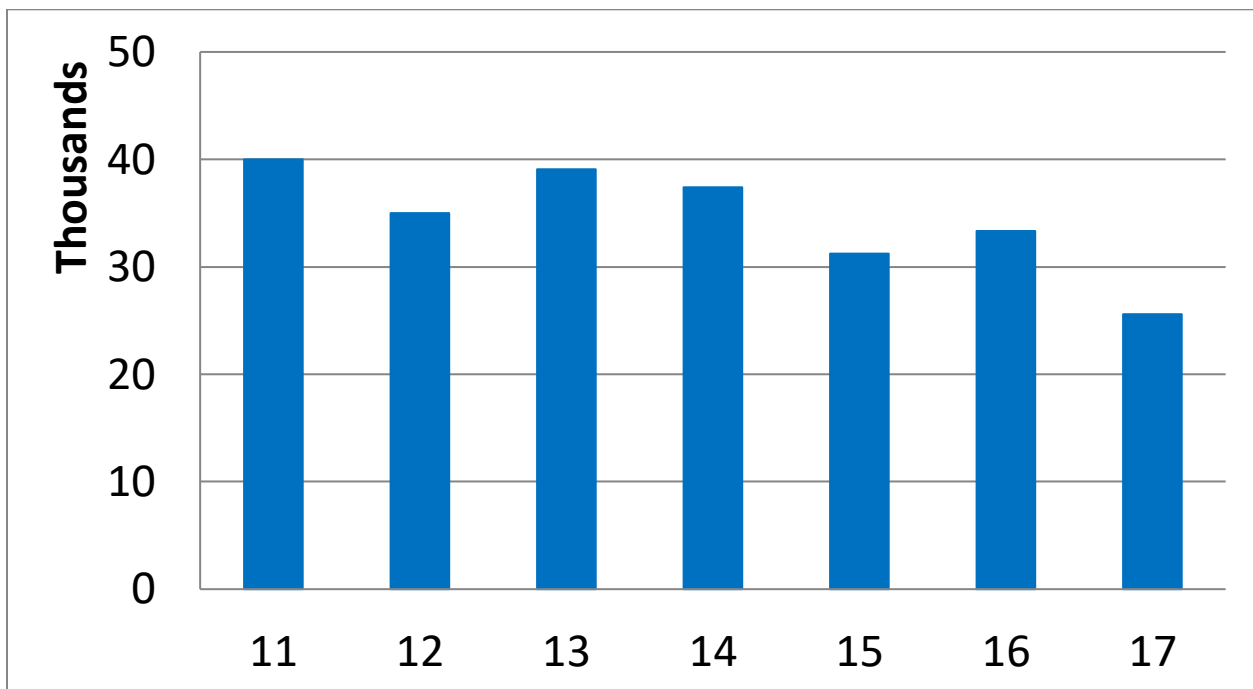
a) CSPI Tons Year over Year

- Ray presented the following graphs showing CSP tonnage reported down 12% from 2016:

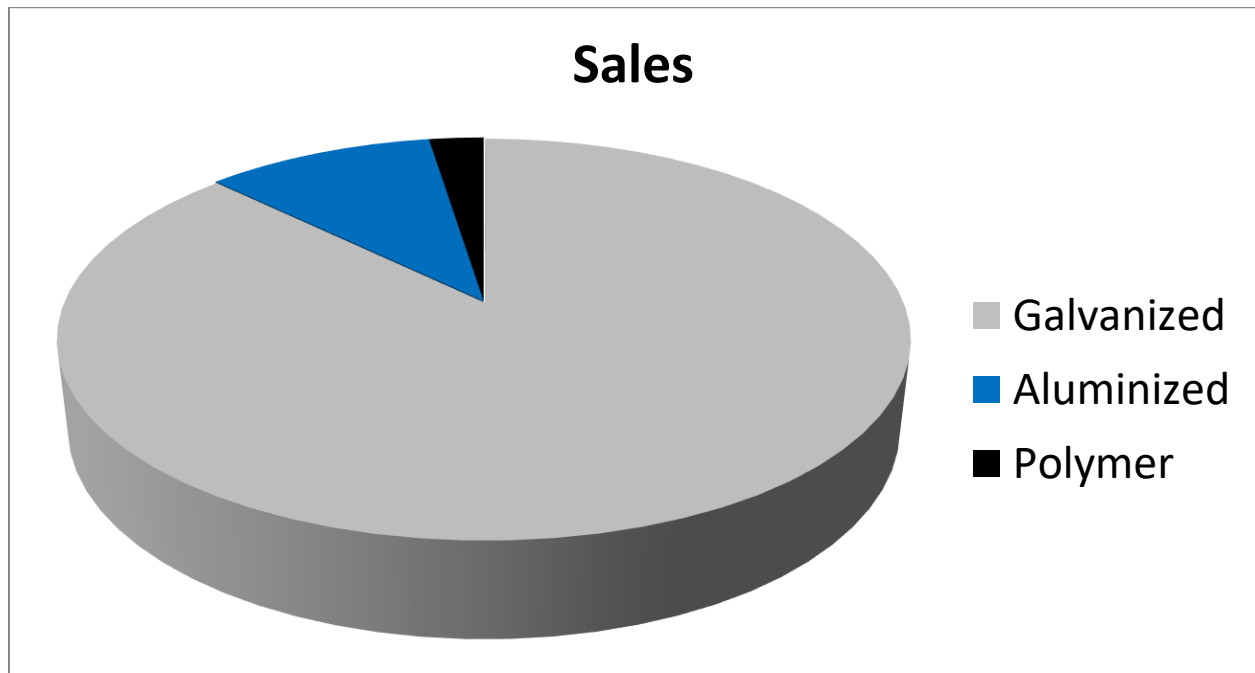
Total Industry CSP Tons Reported 2001 – 2017 3rd Q (includes estimates for non-members)



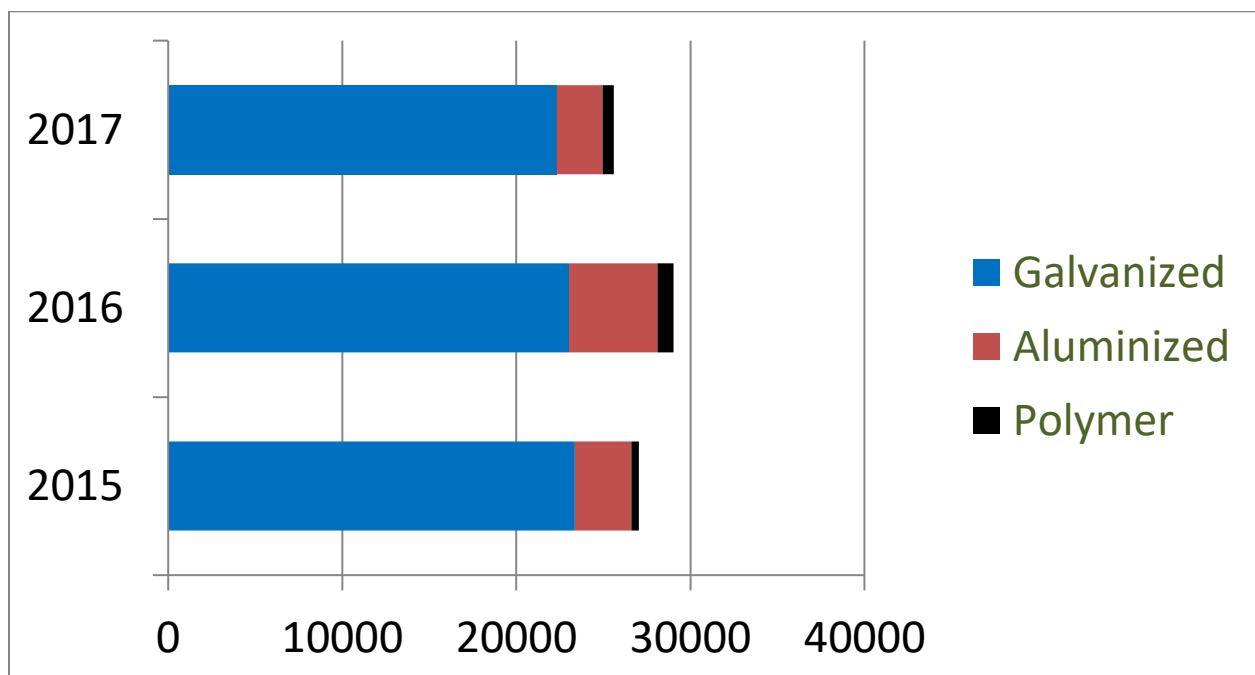
CSPI Tons Reported 2011 – 2017 (3rd Q)



CSPI Tons Reported 2017 3rd Q



CSPI Tons 3rd Quarter Comparison



b) Number Key Clients visited in 2017

Key DOT Clients Visited

<u>2017</u>	<u>DOT</u>	<u>Engineering Staff Attending</u>
Feb 2 nd	MTO Thunder Bay Region	10
Feb 8 th	MTQ Quebec City	5
Feb 15 th	MTO St. Catharines	8 Regional Bridge Heads
Mar 14 th	Sask	5
Mar 21 st	Alberta Trans	2 (Certification, Polymer)
Mar 22 nd	BCMOT	6
Mar 28 th	PEI	2 + 4 Consultants
Mar 30 th	NFLD	5
Apr 5 th	Manitoba	9
Aug 2 nd	MTO Stakeholders Workshop	24
Aug 9 th	Alberta Trans	3 (Certification, Welding)
Aug 21 st	MTO St. Catharines	3 (Bridge Manual)
Sep 12 th	MTQ Quebec City	6 (Bolts / Polymer Plate)
Sep 15 th	MTO St. Catharines	1 (OGPDG)
Nov 2 nd	MTO Thunder Bay	5 (Site visit – material research)

Key Municipalities Visited

2017

Feb 2 nd	City of Thunder Bay	6
Feb 6 th	City of Fredericton	1 (Chief Engineer)
Feb 6 th	CFB Gagetown	1 (Chief Engineer)
Mar 9 th	City of London	10
Mar 21 st	City of Edmonton	6
Mar 23 rd	City of Langley	1 (Chief Engineer)
Mar 24 th	City of Vancouver	2 (Chief Engineer + Assoc.)
Mar 29 th	City of St. John's	8
Apr 26 th	City of Windsor	6
July 6 th	Wellington County – Ontario	2
July 31 st	Sudbury	4 (site visit)
Nov 27 th	Hamilton	1 (Chief Engineer)
Dec 12 th	Halifax	Scheduled

c) Key Market Product Approvals

DOT's

Owner	Gal. CSP	AL2 CSP	PL CSP	Gal. SP	TP SP	HDPE	RCP	Certification
NFLD	No	Yes	No	Yes	No	<600mm	Yes	No
PEI	Yes	Yes	No	Yes	No	Yes	Yes	No
NS	Yes	Yes	No	Yes	Yes	Yes	Yes	No
NB	No	Yes	No	Yes	No	Yes	Yes	No
PQ	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes - CSP
ON	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MB	Yes	Yes	Yes	Yes	Yes	?	Yes	No
SK	Yes	No	No	Yes	No	Yes	Yes	Yes
AT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BC	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Open item:

If no – is there a value engineering solution? Requires more research.

Specifications

Ontario – MTO

Ontario Gravity Pipe Design Guidelines for CSP, HDPE & Precast (April 2014)
Design Build Structural Culverts for SP, CIP, & Precast (March 2015)

BC – MOT

2016 Standard Specifications for Highway Construction – July 1, 2016
Covers CSP, HDPE & Precast (July 2016)

Alberta

Standard Specifications for Highway Construction (CSP – Section 5.23) (August 2013)
Standard Specifications for Bridge Construction (SPCS – Section 18) (April 2017)

Saskatchewan

Specifications for manufactured Materials – Section 701 (May 2017)

Manitoba

Approved Product List (July 2017)

NFLD	Specifications Book (March 2011)
NB	Minimum Standards for the Construction of Subdivision Roads & Streets (May 2017)
NS	Highway Construction & Maintenance Standard Specification (February 1997)
PEI	General Provisions and Contract Specifications for Highway Construction (February 2017)

Next Steps:

1. Quebec – requested 75-year material service life for Polymer Coated SP and Leland NZF3000 bolts for out of water structures and class 1 Abrasion for structures in the water – follow up.
2. Ontario – Provide polymer coated plate materials by the end of the 2017 year - SP Design Manual.
3. Post this list to the member section website.
4. Visit all DOT's in 2018 for further follow up / maintaining relationships.

Municipalities

Owner	Gal. CSP	AL2 CSP	PL CSP	Gal. SP	TP SP	HDPE/ PVC	RCP	Value Eng.
Vancouver Storm Sewer Culverts								
Langley								
Victoria								
Edmonton Storm Sewer Culverts	No Yes	No No	No No	No	No	PVC PVC	Yes Yes	
Calgary Storm Sewer* Culverts	Yes Yes	Yes No	Yes No	Yes	No	PVC & PE Approval Req.	Yes No	
Saskatoon								
Regina Storm Sewer Culverts	No Yes	No Yes	No Yes	DOT	DOT	PVC<450mm HDPE	Yes	
Winnipeg								

Thunder Bay Storm Sewer Culverts	No No	No Yes	No No	OPS	OPS	PVC<375mm HDP<900mm	Yes No	
Sudbury								
Toronto Storm Sewer Culvert	No	No	No			PVC	Yes	
Hamilton Storm Sewer Culvert	No Yes	No Yes	No No	OPS	OPS	PVC HDPE	Yes Yes	
London	No	No	No	OPS	OPS	Yes	Yes	
Windsor Storm Sewer Culverts	Yes No	Yes No	Yes No	OPS	OPS	Yes PVC & PE	Yes Yes	
Region of Waterloo Storm Sewer Culverts	No	No	No			Yes<600mm	Yes	
St. Catharines Storm Sewer Culverts	No Yes	No Yes	No Yes	OPS	OPS	Yes Yes	Yes Yes	
Kingston								
Ottawa								
Oshawa								
Montreal								
Sherbrooke								
Quebec City								
Trois- Rivieres								
Saguenay								
Fredericton Storm Sewer Culverts	No No	No No	No No	No No	No No	Yes No	Yes Yes	
Moncton								
Halifax Storm Sewer Culverts	No	No	No			Yes	Yes	
St. Johns	No	No	No	NFDOT	NFDOT	Yes	Yes	

* Mains only, requires approval from Water Resources on a case by case basis

There is a distinction between storm sewers (urban) and culverts in the rural areas. CSP is allowed in rural area for culvert crossings, however not in city storm sewers. For storm sewers, spiral rib profiles are required to achieve required “Manning’s” flow. Diameters start at 300mm.

- Next Steps:**
- 1. Update the remaining municipalities.**
 - 2. Put together product specification files with members.**
 - 3. Submit product specifications to municipality product review committees.**
 - 4. Presentations / plant visits may be required.**
 - 5. Register as a lobbyist in Quebec.**

Discussion ensued with highlights as follows:

Heba – target municipality product acceptance committees

Kevin – asked what material do we want to tackle?

Jason – go after low hanging fruit

Marc – go after culverts in the municipalities, storm sewers a long-term item

Mike McGough – stated U.S. is similar to Canada for storm sewer CSP acceptance. He mentioned that ASTM standards contain connections to concrete manholes and that CSP has the best joint of all products. Jim Evans concurred that a positive connection with gasket is a superior connection that bell and spigot.

Jason – suggest that we prepare a SWM technical bulletin on CSP versus RCP and other materials. The committee agreed that SWM is a member focus as the targets are private developers and engineering consultants.

Jason – focus should be on top 10 cities for storm sewers and culverts

Bruce – put together a life cycle analysis to use for leverage with the cities

The 4 objectives going forward agreed upon were:

- 1. Continue the focus on Bridges / Structural Plate**
- 2. SWM – member focus. TAC committee to prepare a technical bulletin comparing systems.**
- 3. Technical bulletin on LCA for the municipalities – Spiral Rib versus Concrete.**
- 4. Focus on the top 10 cities and submit material / product applications.**

From June Meeting

Randy suggested CSPI investigate Federal Public Works in BC and Parks Canada. Phil volunteered to work with Ray. In addition, add the Yukon & NW Territories to the chart – research and future visit.

d) Number of Students/Institutions Presented thus far in 2017

<u>Date</u>	<u>University / College</u>	<u># of Students</u>
Jan 16 th	University of Guelph	250
Jan 24 th	University of Western	30
Jan 26 th	St. Clair College, Windsor	35
Feb 1 st	Lakehead University, Thunder Bay	25
Feb 6 th	University of New Brunswick	20
Feb 7 th	Universite de Moncton	30
Feb 13 th	McMaster University, Hamilton	50
Mar 3 rd	University of Windsor	45
Mar 6 th	University of Saskatchewan	109
Mar 7 th	University of Regina	10
Mar 8 th	OGRA Storm Sewer Course	45 (Heba spoke)
Mar 17 th	Seneca College, Toronto	45
Mar 22 nd	Okanagan College, BC	35
Mar 23 rd	University of BC	30
Mar 27 th	St. Lawrence College, Kingston	36
Mar 29 th	Memorial University, NF	30
Mar 30 th	North Atlantic College NF	30
Apr 4 th	University of Toronto	125
Oct 24 th	University of Western	30
Nov 2 nd	Lakehead University, Thunder Bay	25

20 Guest Lectures 1,035 Students

5. Assessment

- a. Are we answering the question why steel?
 - i. SWM feedback
1. Prefer concrete in congested urban areas – will allow CSP in rural crossings only
2. Past experiences – perception is that steel does not last (rusts / failures)
3. Biased – however younger people coming in are more open

Recommendation:

1. Education is the key / presentations / E Blasts
2. Building relationships and trust for steel products
3. CSPI – focus on standards and product acceptance at the DOT and Municipal level
4. CSPI – focus on tackling items requiring follow up
5. Members – focus on SWM with private developers / engineering consultants / getting specified

Kamran suggested that we take a more aggressive approach against RCP – formidable given their resources in both \$ and personnel.

ii. Buried bridge feedback

Opportunity on bridges – feedback was positive. Jason suggested we look at the Coquihalla Highway in BC and do a comparison between buried bridges and conventional bridges that are saddled with deck repairs and costs of servicing. Work with BCMOT on life cycle costing (Rehabilitation versus Buried Bridges). Ray & Phil to reach out to University of BC - work with a grad student to do the study (costs to be estimated).

- b. Are we penetrating the concrete market?
 - i. Product Approvals

Members agreed to focus on standards in storm sewers and culverts.

c. Academic Education feedback

Continue to focus on education outreach and use members for guest lectures when Ray is not available.

6. Discussion / New Business

None

7. Strategic Plan Adjustments

As per above.

8. Adjourned at & Next Meeting

The meeting was adjourned at **10:15 am**. Next meeting will be at the annual meeting in Mont-Tremblant, Quebec on Monday, June 11th, 2018.

Ray Wilcock
Secretary